SALMON RIVER RESTORATION COUNCIL
Jobs In The Woods (JITW)
Cooperative Agreement # 14-48-0001-95556
Projects 95-JITW-03 & 04

Final Report

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A) Abstract

This project has improved the riparian habitat conditions on approximately 63 acres of private land that the SRRC in coordination with United States Forest Service has prioritized in the Salmon River subbasin. This includes 2.25 miles of roadside fuelbreaks and revegetation of eroding cutbanks and fill slopes along 2.5 miles of road. Between the July of 1995 and December of 1997, 23 previously unemployed forest workers (and/or members of timber dependant local communities) were employed on this project - (an 8 person crew performed fuels reduction activities). A total of 426 person days were spent on fuels reduction and vegetative release during these Projects. An additional 108 person days were spent on seed collection, plant propagation, planting, erosion control and monitoring activities. There were approximately 258 person days of work donated by the private landowners and SRRC volunteers. There was $ 90,281 provided by the US Fish and Wildlife Service and a value of $ 23,420 donated through the SRRC.

B) Introduction

In response to the catastrophic fires which have significantly contributed to watershed degradation in the Salmon River subbasin, the Salmon River Restoration Council has accomplished various tasks to enhance riparian habitat damaged in recent fires and reduce the risk of habitat degradation in future wildfire events. Through the SRRC, an eight person crew performed approximately 534 days of prioritized restoration and protection tasks on private lands in the Salmon River subbasin. This work included: collection and propagation of native riparian plants; riparian area fuels management,

vegetative release and planting; installation and maintenance of an irrigation system for targeted plants, and road stabilization. Restoration activities focus on stabilizing damaged riparian areas, initiating shaded fuel breaks and revegetating impacted roads and streams.

There were 426 person days associated with fuels management and native plant release. There have been approximately 108 funded person days of work completed that is associated with the Nursery portion of the work involving nursery activities.

Tasks in this project were performed in consultation with various agencies and the Karuk Tribe. Various techniques were utilized. The SRRC and private landowners cooperatively learned and applied various restoration techniques that lend to an ecosystem management approach. Community support for the SRRC and the recovery of the Salmon River subbasin has been increased.

C) Description of Study Area

The entire Salmon River subbasin is identified as a key watershed in the President's Forest Plan. It hosts one of the largest runs of wild Spring Chinook Salmon in the west coast. As compared to other rivers in the Klamath Basin it is the most biologically intact subbasin. High water temperatures and excessive sediment production have been identified as being the key limiting factors for the anadromous fisheries resource in the Salmon River subbasin. The recent catastrophic wildfires are directly tied to increased water temperatures and sediment production. The fire history and fire potential of this subbasin establish increased catastrophic wildfire occurrence as the number one threat to fisheries and watershed health. Without critical fuels management, one can easily predict that catastrophic wildfires will return more frequently in the Salmon River. Rehabilitating fire damaged habitats and restoring fire to its natural role in the subbasin with support from the Salmon River stakeholders is the key focus of this project.

D) Methods and Materials

The SRRC was provided $ 90,281 through the Jobs-in-the-Woods Program for 1995 through 1997. These funds were provided to the SRRC for reducing excessive fuel loading and releasing native vegetative species in and adjacent to riparian areas on private property. The funding also paid for the collection, propagation, and planting of desired native plant species. The restoration work focused on lands burned by catastrophic fire and which were prioritized by the Forest Service and SRRC staff.

NURSERY AND EROSION CONTROL ACTIVITIES

During this project community members collected, cleaned, dried, stored, or planted various native plant parts needed for this project. **Nursery equipment** such as: soil and amendments, containers, flats, heating mats, shade cloth, greenhouse plastic were purchased to upgrade the various nursery facilities at 3 sites. Several of the project

private landowners and the local elementary schools with home greenhouse-nursery facilities participated in nursery activities.

Native grasses, shrubs, and deciduous and coniferous tree cuttings and seeds were collected, grown and planted. These species include mock orange, cottonwood, California hazelnut, willows, mugwort, dogwood, mock orange, yew, buck lotus, grey (digger) pine, incense cedar, redbud, lupine, Blue Wild Rye, California Fescue, Onion Grass and Slender Hairgrass.

There were approximately 25 pounds of grass seed collected from targeted native populations. There were 12 lbs of the native grass seed that was spread on cut-banks and fill slopes at key areas along 2 miles of road in need of **erosion control**. The remaining 13 pounds of native grass seed were grown in flats and containers at the nursery facilities.

More than 7,200 native plants were planted in the constructed fuelbreaks and riparian areas to promote shade. There were 1,400 willow cuttings were collected and directly planted at targeted areas at the Godfrey Ranch. Three water systems were set up and maintained which serviced approximately 1200 seedlings. Equipment acquired for the irrigation systems included: plastic pipe; 4 water timing devices, water filters, water drippers and connection barbs and drip (spaghetti) tubing.

Several waterbars and/or drainage structures were installed at various sites along roads, skid trails, fuel breaks and around old log decks. Water was diverted away from active slides and areas where gullies were forming.

FUELS REDUCTION AND VEGETATION RELEASE

During this project we completed various fuels management tasks. An 8 person crew cut and piled excessive fuel loading and released native vegetation in areas in or adjacent to riparian reserves. The piles were either burned or chipped. When possible the piles were burned outside of the riparian area. Often the targeted fuels were piled and/or chipped or burned on adjacent roads, turnouts, skid trails, landings, or areas that have recently burned. The chips were applied to road cutbanks and fills. In some areas the chips were mixed with native grass seed to test the potential for positive results. Small areas being taken over by Himalayan Blackberry were broadcast burned and planted. Some scattered fuel areas were treated with a "lop and scatter" prescription. The handpiling and release was accomplished by a predominantly local crew in the Winters and Springs of 1995 through 1997. Work occurred depending on the weather, access, and burning conditions. Most members of the crew are displaced forest workers and all come from communities that have been negatively impacted by the recent decline in the timber industry.

Fuels management was accomplished at 18 parcels of private property that include: 6 parcels at the Godfrey Ranch (32 acres) and 1 parcel at Blue Ridge Ranch (8 acres), 2 parcels at Eddy's Gulch (5 acres), 1 parcel at Glasgow Bar (2 acres), 4 parcels in Cecilville (4 acres), 3 Parcels in the Finley Camp Area (5 acres), 1 parcel at Taylor Creek (2 acres), and 1 parcel at Butler Flat (3 acres). A total of 63 acres of land at 18 parcels in the Salmon River subbasin received fuels treatment.

PROJECT DEVELOPMENT AND ADMINISTRATION

Various administrative services were performed by the project staff. Progress Reports were submitted and a field review took place with the US Fish and Wildlife Service Field coordinator. The co-coordinators (Jim Villeponteaux and Peter Brucker) performed the project lay out work, and supervised the project implementation. The co-coordinators also performed the monitoring and reporting tasks for the amendments to our FY-95 cooperative agreement.

For this project, the SRRC project staff spent many hours researching, developing and securing consensus approval for this project. Aside from developing the initial project, the staff needed cultural resource and Threatened, Endangered, and Sensitive (TE&S) species review and approval. The SRRC coordinators participated in on the ground and written review of the cultural resource with US Fish and Wildlife Service and Karuk Tribe personnel. Methods were developed and used to insure that no negative impacts are caused to either cultural resources or TE&S species.

PROJECT MONITORING AND REPORTING

Photo documentation was taken at each work area (Appendices #2.)

A GIS data base and ArcView Mapping information was generated for planting areas at the Godfrey Ranch. The ArcView project includes planting information (See Appendices #1).

Regular Progress Reports were submitted as work was completed and/or milestones were reached.

E) Results and Discussion

Through this project the SRRC modified excessive fuel loading, with a focus on reducing the risk of future catastrophic fire. At various sites fuels were reduced in the area below and adjacent to the riparian area to create a fuel buffer zone. When possible, these fuels will be burned or removed from the riparian area. There were approximately 2.25 miles of road in which fuel breaks were installed on private property. SRRC participants, landowners and other community members learned and applied techniques in collecting, propagating, seeds and cuttings from native

vegetation. There was approximately a 60% survival rate for irrigated plants as compared with a 25% survival of the non-irrigated plants. On all lands treated suppressed native riparian and upslope vegetation were released to speed up the recovery of the overstory.

Erosion control techniques were applied at key sites along 2.5 miles of road associated with private land. This was accomplished by stabilizing failing cut and fill slopes of roads through grass seeding and native tree and shrub planting. Light road maintenance activities (cleaning culverts and ditches) helped to correct drainage problems associated with roads in riparian areas. Private landowners donated a significant amount of time to accomplish the project and to maintain the work after project completion. The participants worked together to identify efficient techniques used in plant propagation, fuels management, revegetation, erosion control and other restoration activities in the Salmon River riparian habitat.

Approximately 63 acres of land were treated with fuels reduction, native plant release, revegetation, and erosion control on 18 parcels. Some of the Parcels and Acres had more than one activity. An eight person crew composed of displaced timber workers were employed for 534 person days.

IN KIND CONTRIBUTIONS:

- Tending and watering nursery plants - 43 person days = $ 3,440.00.
- Monitoring native plant seed maturity and finding collection sites - 20 Person Days - $ 1,600.00.
- Drive Time for collection, monitoring, planning and some crew work - 2 Hours per crew workday per person = $ 10,680.00.
- Landowner participation- Fuels reduction and maintenance of fuel control areas. The landowners will also insure that vegetation stocking is adequate - 65 person days **and ongoing** - $ 5,200.00 (to date).
- Use of the camera for photo-documentation will be provided by the cooperator.
- Vehicles for transportation will be donated. [Estimated: $1,250.00]
- Travel time for acquiring equipment and material will be donated. [Estimated: $500.00]
- Seed and cutting collection tools will be donated. [Estimated: $250.00]
- Use of greenhouse space and some supplies will be donated. [Estimated: $1,000.00]

F) Summary and Conclusion

Through this project displaced timber workers learned new ways to make a living in the woods, focusing on restoring the watershed rather than promoting negative impacts. Several private landowners and other community members also learned new skills

needed to restore the Salmon River ecosystem. Through this project the private landowners and the general community have increased their support and commitment for protection and restoration of the Salmon River subbasin. This project has increased cooperation between the private and public stakeholders. It has increased the ability for ecosystem management to occur across private and public property lines. The project has helped open the door for more fire management planning and implementation of projects which integrates both federal and private lands in the Salmon River.

Cooperative fire management projects such as this are essential to an overall program needed to reduce fuels and prevent future catastrophic fires and associated impacts. The SRRC endorses several activities which will positively contribute to an effective fire management strategy in our highly fire-prone subbasin. This project has been key to bringing together local community members and other stakeholders in working towards common goals. This project has also paved the way to future projects needed to expand our cooperative fire management vision.

Future projects will continue techniques used in this activity, as well as using the following methods to manage the current excessive fuel levels:

- Cooperative (Private & USFS) underburning activities.
- Residential property fuels reduction.
- Comprehensive Fuelbreak needs identification.
- Overall cooperative fire management strategy for the subbasin which will include defensible zone analysis and prioritization of management needs.

G) Summary of Expenditures

Category	Budgeted	Received	Spent
Salary	$66,341.15	$65,541.15	$65,454.27
Expendable Equipment	$4,300.00	$4,620.00	$4,269.10
Operations & Maintenance	$1,570.00	$1,250.00	$1,616.50
Administration	$18,070.06	$17,870.06	$18,020.69
Total	$90,281.21	$89,281.21	$89,360.56

Above Expenditures do not include Final Report and GIS Products.

H) Appendices

1) Maps of Project Sites including Overview and Planting Locations
2) Site Photos